

Physics	Group-II	Paper-II
Time: 15 Minutes	(Objective Type)	Max. Marks: 12

Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

- 1-1- Which of the following is not processing:
 - (a) Arranging
 - (b) Manipulating
 - (c) Calculating ✓
 - (d) Gathering
- 2- One of the isotope of uranium is $^{238}_{92}\text{U}$. The number of neutrons in this isotope is:
 - (a) 92
 - (b) 146 ✓
 - (c) 238
 - (d) 330
- 3- The particles emitted from a hot cathode surface are:
 - (a) Positive ions
 - (b) Negative ions
 - (c) Protons
 - (d) Electrons ✓
- 4- For a normal person, audible frequency range for sound wave lies between:
 - (a) 10 Hz – 10 KHz
 - (b) 20 Hz – 20 KHz ✓
 - (c) 25 Hz – 25 KHz
 - (d) 30 Hz – 30 KHz
- 5- The types of spherical mirrors are:
 - (a) 2 ✓
 - (b) 4
 - (c) 6
 - (d) 8
- 6- What is the voltage across a $6\ \Omega$ resistor when 3A of current passes through it:
 - (a) 2 V
 - (b) 9 V
 - (c) 18 V ✓
 - (d) 36 V

- 7- Which part of a D.C. motor reverses the direction of current through the coil every half cycle:
- (a) Armature (b) Commutator
(c) Brushes (d) Split rings ✓
- 8- Which is the most suitable means of reliable continuous communication between an orbiting satellite and earth:
- (a) Microwaves ✓ (b) Radio-waves
(c) Sound-waves (d) Any light wave
- 9- In vacuum, all electromagnetic waves have the same:
- (a) Speed ✓ (b) Frequency
(c) Amplitude (d) Wavelength
- 10- Unit of charge is:
- (a) Ohm (b) Watt
(c) Coulomb ✓ (d) Ampere
- 11- Capacitance is defined as:
- (a) VC (b) Q/V ✓
(c) QV (d) V/Q
- 12- Which of the following quantity is not changed during refraction of light:
- (a) Its direction (b) Its speed
(c) Its frequency ✓ (d) Its wavelength